

AMENDMENTS TO THE CLAIMS

The following listing of claims replaces all prior versions and listings of claims in the application.

Listing of Claims:

1. (Currently amended): Self-igniting gasoline internal combustion engine comprising at least one cylinder (1), a cylinder head (2) closing the cylinder (1), a piston (3) slidingly arranged in the cylinder (1), a combustion chamber (4) defined in the cylinder (1) between an upper face (30) of the piston (3) and a lower face (20) of the cylinder head (2), means (5) for injecting gasoline into the combustion chamber (4), intake valves (7) and exhaust valves (8) selectively closing the combustion chamber (4), an injection pump (8) intended to supply the injection (5) with pressurized gasoline, the ignition of the air-gasoline mixture being obtained spontaneously in at least a range of operation of the engine thanks to thermodynamic conditions in the combustion chamber (4), ~~characterized in that~~ wherein the pressure of the gasoline provided to the injector (5) is above 250 bars.

2. (Currently amended): Engine according to claim 1, ~~characterized in that~~ wherein the pressure of the gasoline provided to the injector (5) reaches or is above 500 bars.

3. (Currently amended): Engine according to claim 1 ~~or 2, characterized in that~~ wherein injection of the gasoline is made in a time interval situated at the end of the cycle of compression of the load by the cylinder (3).

4. (Currently amended): Engine according to ~~any of claims 1 to 3~~ claim 1, ~~characterized in that~~ wherein injection of the gasoline is made in a time interval comprised between 60 degrees crankshaft before the high dead center of the combustion cycle and 20 degrees crankshaft after the

high dead center.

5. (Currently amended): Engine according to ~~any of claims 1 to 4~~ claim 1, ~~characterized in that it~~ which comprises means (11) for supercharging the intake air intended to be supplied to the combustion chamber (4).

6. (Currently amended): Engine according to ~~any of claims 1 to 5~~ claim 1, ~~characterized in that~~ wherein, at least in a range of operation of the engine, the amount of gasoline delivered by the pump (8) to the injection means (5) for a combustion cycle is fractionated in the form of a plurality of partial and distinct injections.

7. (Currently amended): Engine according to claim 6, ~~characterized in that it~~ which comprises at least one partial injection delivered during the air intake phase into the combustion chamber (4) or during the first part of the compression, and at least one partial injection delivered around the high dead center, i.e., at a time interval comprised between 60 degrees crankshaft before the combustion high dead center and 20 degrees after this combustion high dead center.

8. (Currently amended): Engine according to ~~any of claims 1 to 7~~ claim 1, ~~characterized in that it~~ which comprises ignition means (6) intended to produce ignition of the air-gasoline mixture in the combustion chamber (4) during the so-called very low load or very high load ranges of operation.

9. (Currently amended): Engine according to ~~any of the preceding claims~~ claim 1, ~~characterized in that it~~ which uses a ratio of residual gases above 20%, and preferably above 50%.

10. (Currently amended): Engine according to ~~any of the preceding claims~~ claim 1, ~~characterized in that it~~ which uses a variable compression ratio.

11. (Currently amended): Engine according to ~~any of the preceding claims~~ claim 1,

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~~characterized in that it~~ which is of the direct-jet or pseudo-direct-jet or deflected-jet type.

12. (New): Engine according to claim 9, which uses a ratio of residual gases above 50%.